

US-NA61 Meeting – March 1, 2012

Prelude: Article about NA61 in Jan/Feb CERN Courier

<http://cerncourier.com/cws/article/cern/48340>

People should feel free to report their successes or failures at accessing the CVS repository and checking out the LOI outline. There are then a few documents I've uploaded to Redmine that I'd like to draw your attention to:

<https://cdcv.s.fnal.gov/redmine/projects/us-na61/documents>

1) **Vittorio's Meeting Slides from Feb 12** - slide 1 gives the LOI/proposal outline and some ideas for writing assignments. We should briefly discuss the outline, assignments and a timeline. Vittorio suggested a draft by next Wednesday that we could discuss a week from today. Ok?

2) NA61 T2K Run - 2 documents

a) First one shows the accumulated statistics in T2K thin target data sets. Looks like they accumulated about 5.5M triggers in 10 days. We have been discussing the possibility of a run of a few days in June. Note that the triggering efficiency may be a bit better for a more collimated 120 GeV beam. If Alberto is able to call in today, then he can provide much more detail. Note the "target out" data is a real issue if we only have a few days of test running that could have physics implications for the thin target data sets. We need to think about this. Maybe target out data at the right energy (or close) already exists for studying this background?

Note: The existing NA61 @T2K thin target publications are based on 667,000 target-in interaction triggers and 46,000 target-out interaction triggers, so we could do a lot with similar statistics.

b) Second document shows the T2K thin target specs and photos. We may be able to reuse this target and target holder for our run at 120 GeV. I understand that this target belongs to KEK, so we would need to check with all the right people about this. Suggestions?

3) **NuMI graphite spec sheet** for comparing to T2K target. Bottom line $\rho_{t2k} = 1.84 \text{ g/cc}$, $\rho_{numi} = 1.78 \text{ g/cc}$. But, as Alberto pointed out, since we would be after invariant cross section on carbon in thin target data, the density basically cancels out, you just need to know what it is.

AOB is definitely welcome for discussion. Okay, talk to everyone soon.